Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Previously Presented) A network system comprising:

a unified networking device configured to:

provide a single-hop communication path between a storage device and a server, a single-hop communication path between the storage device and a network switch, and a single-hop communication path between the server and the network switch, the unified networking device comprising:

an application specific integrated circuit configured to:

determine that an incoming packet requires protocol conversion; and

send at least a portion of the incoming packet to a network processing unit in response to the determination; and

the network processing unit configured to:

identify a first communication protocol of the incoming packet, the incoming packet destined for a destination port associated with a second communication protocol;

determine if the first communication protocol matches the second communication protocol;

determine if the first communication protocol and the second communication protocol have a common layer if the first communication protocol does not match the second communication protocol; and

encapsulate the incoming packet in the second communication protocol if the first communication protocol and the second communication protocol have a common layer.

2. (Original) The network system of claim 1, wherein the unified networking device is further configured to provide a single-hop communication path between the storage device and a router, a single-hop communication path between

the server and the router, and a single-hop communication path between the network switch and the router.

3. (Original) The network system of claim 1, further comprising a second storage device and the unified networking device is further configured to provide a single-hop communication path between the storage device and the second storage device.

4. (Original) The network system of claim 1, wherein the network switch is a load-balancing network switch.

5. (Original) The network system of claim 1, wherein the storage device is a Redundant Array of Independent Disks (RAID).

6. (Original) The network system of claim 1, wherein the storage device is a Just a Bunch of Disks (JBOD).

7. (Original) The network system of claim 1, wherein the storage device is a tape drive.

8. (Original) The network system of claim 1, wherein the unified networking device is configured to communicate with a plurality of servers.

9. (Original) The network system of claim 1, wherein the unified networking device includes a plurality of line cards each having at least one port capable of transmitting packets, and a switch card configured to communicate with the plurality of line cards across a backplane.

10. (Original) The network system of claim 9, wherein the unified networking device includes sixteen line cards each having sixteen ports, and four switch cards, where each switch card is configured to communicate with every other switch card and each line card.

11. (Original) The network system of claim 9, wherein each of the plurality of line cards includes a packet processor in communication with the backplane.

12. (Original) The network system of claim 11, wherein each packet processor is an application specific integrated circuit (ASIC).

13. (Original) The network system of claim 9, wherein the switch card includes at least one flow control application specific integrated circuit (ASIC) and a crossbar switch.

14. (Previously Presented) A network system comprising:

a unified networking device configured to:

provide a single-hop communication path between a storage device and a server, a single-hop communication path between the storage device and a router, and a single-hop communication path between the server and the router, the unified networking device comprising:

an application specific integrated circuit configured to:

determine that an incoming packet requires protocol conversion; and

send at least a portion of the incoming packet to a network processing unit in response to the determination; and

the network processing unit configured to:

identify a first communication protocol of the incoming packet, the incoming packet destined for a destination port associated with a second communication protocol;

determine if the first communication protocol matches the second communication protocol;

determine if the first communication protocol and the second communication protocol have a common layer if the first communication protocol does not match the second communication protocol; and

encapsulate the incoming packet in the second communication protocol if the first communication protocol and the second communication protocol have a common layer.

15. (Previously Presented) A network system comprising:

a unified networking device configured to:

provide a single-hop communication path between a storage device and a network switch, a single-hop communication path between the storage device and a router, and a single-hop communication path between the network switch and the router, the unified networking device comprising:

an application specific integrated circuit configured to:

determine that an incoming packet requires protocol conversion; and

send at least a portion of the incoming packet to a network processing unit in response to the determination; and

the network processing unit configured to:

identify a first communication protocol of the incoming packet, the incoming packet destined for a destination port associated with a second communication protocol;

determine if the first communication protocol matches the second communication protocol;

determine if the first communication protocol and the second communication protocol have a common layer if the first communication protocol does not match the second communication protocol; and

encapsulate the incoming packet in the second communication protocol if the first communication protocol and the second communication protocol have a common layer.

16. (Previously Presented) A network system comprising:

a unified networking device configured to:

provide a single-hop communication path between a server and a network switch, a single-hop communication path between the server and a router, and a single-hop communication path between the network switch and the router, the unified networking device comprising:

an application specific integrated circuit configured to:

determine that an incoming packet requires protocol conversion; and

send at least a portion of the incoming packet to a network processing unit in response to the determination; and

the network processing unit configured to:

identify a first communication protocol of the incoming packet, the incoming packet destined for a destination port associated with a second communication protocol;

determine if the first communication protocol matches the second communication protocol;

determine if the first communication protocol and the second communication protocol have a common layer if the first communication protocol does not match the second communication protocol; and

encapsulate the incoming packet in the second communication protocol if the first communication protocol and the second communication protocol have a common layer.

17. (Previously Presented) A method for system networking, comprising the steps of:

providing a single-hop communication path between at least two storage devices using a unified networking device;

providing a single-hop communication path between a storage device and a server using the unified networking device;

providing a single-hop communication path between a storage device and a network switch using the unified networking device;

determining at an application specific integrated circuit that an incoming packet requires protocol conversion, the unified networking device comprising the application specific integrated circuit;

sending at least a portion of the incoming packet from the application specific integrated circuit to a network processing unit in response to the determination, the unified networking device comprising the network processing unit;

identifying at the network processing unit a first communication protocol of the incoming packet, the incoming packet destined for a destination port associated with a second communication protocol;

determining if the first communication protocol matches the second communication protocol;

determining if the first communication protocol and the second communication protocol have a common layer if the first communication protocol does not match the second communication protocol; and

encapsulating the incoming packet in the second communication protocol if the first communication protocol and the second communication protocol have a common layer.

18. (Original) The method of claim 17, further comprising the step of providing a single-hop communication path between a storage device and a router using the unified networking device.

19. (Original) The method of claim 17, further comprising the step of providing a single-hop communication path between the server and the network switch using the unified networking device.

20. (Original) The method of claim 17, further comprising the step of providing a single-hop communication path between the server and a router using the unified networking device.

21. (Original) The method of claim 17, wherein the network switch is a load balancing network switch.

22. (Original) The method of claim 17, wherein the plurality of storage devices includes a Redundant Array of Independent Disks (RAID).

23. (Original) The method of claim 17, wherein the plurality of storage devices includes a Just a Bunch of Disks (JBOD).

24. (Original) The method of claim 17, wherein the plurality of storage devices includes a tape drive.

25. (Original) The method of claim 17, wherein each single-hop communication path is configured to carry data packets.

26. (Previously Presented) A system for managing communications in a network comprising:

means for providing a single-hop communication path among a plurality of storage devices, providing a single-hop communication path between one of the plurality of storage devices and a server, and providing a single-hop communication path between one of the plurality of storage devices and a network switch;

means for determining at an application specific integrated circuit that an incoming packet requires protocol conversion;

means for sending at least a portion of the incoming packet from the application specific integrated circuit to a network processing unit in response to the determination;

means for identifying at the network processing unit a first communication protocol of the incoming packet, the incoming packet destined for a destination port associated with a second communication protocol;

means for determining if the first communication protocol matches the second communication protocol;

means for determining if the first communication protocol and the second communication protocol have a common layer if the first communication protocol does not match the second communication protocol; and

means for encapsulating the incoming packet in the second communication protocol if the first communication protocol and the second communication protocol have a common layer.

27. (Original) The system of claim 26, wherein the means for providing single-hop communication paths provides a single-hop communication path between one of the plurality of storage devices and a router.

28. (Original) The system of claim 26, wherein the means for providing single-hop communication paths provides a single-hop communication path between the server and the network switch.

29. (Original) The system of claim 26, wherein the means for providing single-hop communication paths provides a single-hop communication path between the server and a router.

30. (Previously Presented) A unified networking device comprising:

a line card including a plurality of ports, at least one of the plurality of ports being configured to communicate with a storage device, at least one of the plurality of ports being configured to communicate with a server, and at least one of the plurality of ports being configured to communicate with a network switch; and

a switch card configured to switch data packets and to communicate with the line card through a backplane;

an application specific integrated circuit configured to:

determine that an incoming packet requires protocol conversion; and

send at least a portion of the incoming packet to a network processing unit in response to the determination; and

the network processing unit configured to:

receive the data packets from the line card, the data packets comprising an incoming packet;

identify a first communication protocol of the incoming packet, the incoming packet destined for a destination port associated with a second communication protocol;

determine if the first communication protocol matches the second communication protocol;

determine if the first communication protocol and the second communication protocol have a common layer if the first communication protocol does not match the second communication protocol; and

encapsulate the incoming packet in the second communication protocol if the first communication protocol and the second communication protocol have a common layer.

31. (Original) The unified networking device of claim 30, wherein at least one of the plurality of ports is configured to communicate with a router.

32. (Original) The unified networking device of claim 30 further comprising sixteen line cards and four switch cards.

33. (Original) The unified networking device of claim 32, wherein each of the sixteen line cards includes sixteen ports.

34. (Original) The unified networking device of claim 32, wherein each of the four switch cards includes at least one flow control application specific integrated circuits (ASICs) and a cross bar switch.

35. (Original) The unified networking device of claim 30, wherein the storage device is a Redundant Array of Independent Disks (RAID).

36. (Original) The unified networking device of claim 30, wherein the storage device is a Just a Bunch of Disks (JBOD).

37. (Original) The unified networking device of claim 30, wherein the storage device is a tape drive.

38. (Original) The unified networking device of claim 30, wherein the line card includes at least one packet processor in communication with the backplane.

39. (Original) The unified networking device of claim 38, wherein the at least one packet processor is an application specific integrated circuit (ASIC).

40. (Original) The unified networking device of claim 30, wherein each of the plurality of ports is configured to send and receive packets.

41. (Original) The unified networking device of claim 30, wherein one of the plurality of ports of the line card is configured to receive packets from the storage device, the line card is configured to send the packets via the backplane to the

switch card, the switch card is configured to switch the packets via the backplane to the line card, and another one of the plurality of ports of the line card is configured to send the packets to the network switch.

42. (Original) The unified networking device of claim 31, wherein one of the plurality of ports of the line card is configured to receive packets from the storage device, the line card is configured to send the packets via the backplane to the switch card, the switch card is configured to switch the packets via the backplane to the line card, and another one of the plurality of ports of the line card is configured to send the packets to the router.

43. (Original) The unified networking device of claim 30, wherein one of the plurality of ports of the line card is configured to receive packets from the storage device, the line card is configured to send the packets via the backplane to the switch card, the switch card is configured to switch the packets via the backplane to the line card, and another one of the plurality of ports of the line card is configured to send the packets to a tape drive.

44. (Previously Presented) A unified networking device comprising:

a line card including a plurality of ports, at least one of the plurality of ports being configured to communicate with a storage device;

a line card including a plurality of ports, at least one of the plurality of ports being configured to communicate with a server;

a line card including a plurality of ports, at least one of the plurality of ports being configured to communicate with a network switch; and

a switch card configured to switch data packets and to communicate with each of the line cards through a backplane;

an application specific integrated circuit configured to:

determine that an incoming packet requires protocol conversion; and

send at least a portion of the incoming packet to a network processing unit in response to the determination; and

the network processing unit configured to:

receive the data packets from the line card, the data packets comprising an incoming packet;

identify a first communication protocol of the incoming packet, the incoming packet destined for a destination port associated with a second communication protocol;

determine if the first communication protocol matches the second communication protocol;

determine if the first communication protocol and the second communication protocol have a common layer if the first communication protocol does not match the second communication protocol; and

encapsulate the incoming packet in the second communication protocol if the first communication protocol and the second communication protocol have a common layer.

45. (Original) The unified networking device of claim 44, further comprising a line card including a plurality of ports, at least one of the plurality of ports being configured to communicate with a router.

46. (Previously Presented) A network system comprising:

a unified networking device configured to communicate with a storage device, server, a router, and a network switch; and

a second unified networking device configured to:

communicate with the storage device, the server, the router, and the network switch, the unified networking device and the second unified networking device further configured to communicate with each other, the second unified networking device comprising:

an application specific integrated circuit configured to:

determine that an incoming packet requires protocol conversion; and

send at least a portion of the incoming packet to a network processing unit in response to the determination; and

the network processing unit configured to:

identify a first communication protocol of an incoming packet, the incoming packet destined for a destination port associated with a second communication protocol;

determine if the first communication protocol matches the second communication protocol;

determine if the first communication protocol and the second communication protocol have a common layer if the first communication protocol does not match the second communication protocol; and

encapsulate the incoming packet in the second communication protocol if the first communication protocol and the second communication protocol have a common layer.

47. (Original) The network system of claim 46, wherein the unified networking device includes a plurality of line cards each having at least one port capable of transmitting packets, and a switch card configured to communicate with the plurality of line cards across a backplane.

48. (Original) The network system of claim 46, wherein the second unified networking device includes a plurality of line cards each having at least one port capable of transmitting packets, and a switch card configured to communicate with the plurality of line cards across a backplane.

49. (Original) The network system of claim 47, wherein each of the plurality of line cards includes a packet processor in communication with the backplane.

60. (Original) The network system of claim 47, wherein the switch card includes at least one flow control application specific integrated circuit (ASIC) and a crossbar switch.

51. (New) The system of claim 1, wherein the network processing unit is further configured to:

determine if the first communication protocol and the second communication protocol have TCP-like functionality if the first communication protocol and the second communication protocol have a common layer; and

perform TCP-proxy function if the incoming packet has TCP-like functionality.

52. (New) The system of claim 1, wherein the network processing unit is further configured to:

determine if the first communication protocol and the second communication protocol have TCP-like functionality if the first communication protocol and the second communication protocol have a common layer; and

perform block storage conversion if the incoming packet does not have TCP-like functionality.

53. (New) The system of claim 14, wherein the network processing unit is further configured to:

determine if the first communication protocol and the second communication protocol have TCP-like functionality if the first communication protocol and the second communication protocol have a common layer; and

perform TCP-proxy function if the incoming packet has TCP-like functionality.

54. (New) The system of claim 14, wherein the network processing unit is further configured to:

determine if the first communication protocol and the second communication protocol have TCP-like functionality if the first communication protocol and the second communication protocol have a common layer; and

perform block storage conversion if the incoming packet does not have TCP-like functionality.

55. (New) The system of claim 15, wherein the network processing unit is further configured to:

determine if the first communication protocol and the second communication protocol have TCP-like functionality if the first communication protocol and the second communication protocol have a common layer; and

perform TCP-proxy function if the incoming packet has TCP-like functionality.

56. (New) The system of claim 15, wherein the network processing unit is further configured to:

determine if the first communication protocol and the second communication protocol have TCP-like functionality if the first communication protocol and the second communication protocol have a common layer; and

perform block storage conversion if the incoming packet does not have TCP-like functionality.

57. (New) The system of claim 16, wherein the network processing unit is further configured to:

determine if the first communication protocol and the second communication protocol have TCP-like functionality if the first communication protocol and the second communication protocol have a common layer; and

perform TCP-proxy function if the incoming packet has TCP-like functionality.

58. (New) The system of claim 16, wherein the network processing unit is further configured to:

determine if the first communication protocol and the second communication protocol have TCP-like functionality if the first communication protocol and the second communication protocol have a common layer; and

perform block storage conversion if the incoming packet does not have TCP-like functionality.

59. (New) The method of claim 17, further comprising the steps of:

determining if the first communication protocol and the second communication protocol have TCP-like functionality if the first communication protocol and the second communication protocol have a common layer; and

performing TCP-proxy function if the incoming packet has TCP-like functionality.

60. (New) The method of claim 17, further comprising the steps of:

determining if the first communication protocol and the second communication protocol have TCP-like functionality if the first communication protocol and the second communication protocol have a common layer; and

performing block storage conversion if the incoming packet does not have TCP-like functionality.

61. (New) The system of claim 26, further comprising:

means for determining if the first communication protocol and the second communication protocol have TCP-like functionality if the first communication protocol and the second communication protocol have a common layer; and

means for performing TCP-proxy function if the incoming packet has TCP-like functionality.

62. (New) The system of claim 26, further comprising:

means for determining if the first communication protocol and the second communication protocol have TCP-like functionality if the first communication protocol and the second communication protocol have a common layer; and

means for performing block storage conversion if the incoming packet does not have TCP-like functionality.

63. (New) The device of claim 30, wherein the network processing unit is further configured to:

determine if the first communication protocol and the second communication protocol have TCP-like functionality if the first communication protocol and the second communication protocol have a common layer; and

perform TCP-proxy function if the incoming packet has TCP-like functionality.

64. (New) The device of claim 30, wherein the network processing unit is further configured to:

determine if the first communication protocol and the second communication protocol have TCP-like functionality if the first communication protocol and the second communication protocol have a common layer; and

perform block storage conversion if the incoming packet does not have TCP-like functionality.

65. (New) The device of claim 44, wherein the network processing unit is further configured to:

determine if the first communication protocol and the second communication protocol have TCP-like functionality if the first communication protocol and the second communication protocol have a common layer; and

perform TCP-proxy function if the incoming packet has TCP-like functionality.

66. (New) The device of claim 44, wherein the network processing unit is further configured to:

determine if the first communication protocol and the second communication protocol have TCP-like functionality if the first communication protocol and the second communication protocol have a common layer; and

perform block storage conversion if the incoming packet does not have TCP-like functionality.